



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,236	03/25/2005	Masataka Yamamoto	1858-47	6187
23117	7590	10/06/2006	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			GERRITY, STEPHEN FRANCIS	
			ART UNIT	PAPER NUMBER

3721

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/529,236

Applicant(s)

YAMAMOTO ET AL.

Examiner

Stephen F. Gerrity

Art Unit

3721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/9/05, 12/8/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### **Response to Preliminary Amendment**

1. Receipt is acknowledged of a preliminary amendment, filed 25 March 2005, which has been placed of record and entered in the file.

### **Information Disclosure Statement**

2. Receipt is acknowledged of Information Disclosure Statements, filed 9 June 2005 and 8 December 2005, which have been placed of record in the file. An initialed, signed and dated copy of each of the PTO-1449 forms is attached to this Office action.

### **Drawings**

3. The drawings are objected to because on sheet 3, the figures collective labeled Fig. 3, must each be individually labeled, such as Fig. 3A, Fig. 3B and Fig. 3C.

*The required change to the drawings will also require a corresponding amendment to the brief drawing description section at page 11, last paragraph.*

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

Art Unit: 3721

of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### **Specification**

4. The abstract of the disclosure is objected to because it is of excessive length and because of the use of legal phraseology. Correction is required. See MPEP § 608.01(b).

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use

Art Unit: 3721

thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

### **Claim Rejections - 35 USC § 112**

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 6 and 7, the language "wherein the film (B) is the film with small shrinkability (A)" renders the claim vague and indefinite. It is suggested that the language be rewritten as "wherein the film (B) comprises the same film as the film with small shrinkability (A)".

These and any other informalities should be corrected so that the claims may particularly point out and distinctly claim the subject matter which applicant regards as the invention, as required by 35 U.S.C. § 112, second paragraph.

### **Claim Rejections - 35 USC § 102**

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claim 12 is rejected under 35 USC § 102(b) as being anticipated by Sumitomo Bakelite Company (**JP 61-6787**).

The Sumitomo Bakelite Company reference discloses a film with small shrinkability which film has a residual heat shrinkage rate at 100°C of more than 10% and is formed by stretching and then thermally relaxing a film having a surface which is formed of a heat sealable material. Regarding the recitations in the claim “for deep draw packaging” and “to become the inner wall of a container” such are merely intended use recitations for the film. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

### **Claim Rejections - 35 USC § 103**

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1 and 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Utz et al. (**US 3,956,867**) in view of Sumitomo Bakelite Company (**JP 61-6787**).

The Utz et al. reference discloses a deep draw packaging method comprising placing an object (32) in a concave container portion (30) formed through molding of a film (18) the film having a surface which is formed of a heat sealable material (col. 2, line 54 through col. 6, line 2) and which becomes the inner wall of the container portion (30); transferring the concave container portion (30) to a vacuum packaging apparatus (16); placing, on the concave container portion (30), a cover portion formed of a film (56) which can be heat welded to the film (18); thermally shrinking a side face portion and a bottom face portion (col. 3, line 64 through col. 4, line 28) of the concave container portion (30) by use of a concave portion heating/shrinking mold (fig. 1 or fig. 3) such that the side face portion and the bottom face portion come into close contact with the object (32); and sealing an upper peripheral portion of the concave container portion (30) with the film (56) through heating/sealing means (18). The Utz et al. reference discloses a method in which a package with a minimum of wrinkles is achieved by using a film stretched into a mold and subsequent thermal shrinking it so that side face portions are brought into close contact with the product. The Utz et al. reference is silent on the amount of the shrinkability of the film used, but apparently uses the same material combination, i.e. a resin layer combined with a polyamide layer. The Utz et al. reference meets all of applicant's claimed subject matter with the exception of the film being a film with small shrinkability having a residual heat

Art Unit: 3721

shrinkage rate at 100°C of more than 0 and 15% or less, and the film being formed by stretching a film having deep draw moldability and then thermally relaxing the film.

The Sumitomo Bakelite Company reference discloses that it is old and well known in the relevant art to provide a film with small shrinkability having a residual heat shrinkage rate at 100°C of greater than 10% (which is within the range), and the film being formed by stretching a film having deep draw moldability and then thermally relaxing the film.

It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified the Utz et al. reference to have made use of a film with small shrinkability having a residual heat shrinkage rate at 100°C of greater than 10%, and the film being formed by stretching a film having deep draw moldability and then thermally relaxing the film, as taught by the Sumitomo Bakelite Company reference, in order to ensure high quality packaging with no wrinkling of the package film. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Regarding claim 5, the Utz et al. reference discloses that the object (30) is a processed food (meat).

Regarding claims 6 and 7, the Utz et al. reference discloses that the cover film (B) is the [same type of film as the] film with small shrinkability (A).

Regarding claims 8 and 9, the Utz et al. method, as modified by the Sumitomo Bakelite Company reference, meets all of applicant's claimed subject matter but does



not disclose that the temperature used in the vacuum packaging apparatus (16) can have a temperature range of 70 to 120 °C. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have further modified the Utz et al. method by having had the temperature used in the vacuum packaging apparatus have a temperature range of 70 to 120 °C. as a matter of operating-design choice, since applicant has not disclosed that such a temperature range solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with other temperature ranges which produce the required result.

Regarding claims 10 and 11, as seen in figures 3 and 4 of the Utz et al. reference discloses that the vacuum packaging apparatus (16) has a structure such that the concave portion heating/shrinking mold (122, 123) comes into close contact with the side face portion (125) and the bottom face portion (230) of the concave container portion (30) after initiation of evacuation.

**13.** Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art, as applied to claim 1 above, and further in view of Takahisa et al. (**JP 2000-037828**).

The Utz et al. method, as modified by the Sumitomo Bakelite Company reference, meets all of applicant's claimed subject matter with the exception of the film with small shrinkability is formed by stretching a film having deep draw moldability at 80 to 95°C with extension ratio of 2.5 to 4.0 times in a machine direction (MD) and with

Art Unit: 3721

extension ratio of 2.5 to 4.0 times in a transverse direction (TD), and then shrinking the film at 70 to 98°C by 10 to 40% in the MD and by 10 to 40% in the TD.

The Takahisa et al. reference '828 discloses that it is old and well known in the relevant art to provide a film with small shrinkability is formed by stretching a film having deep draw moldability at 80 to 95°C with extension ratio of 2 to 4 times in a machine direction (MD) and with extension ratio of 2 to 4 times in a transverse direction (TD), and then shrinking the film at 60 to 98°C by 0 to 25% in the MD and by 0 to 25% in the TD -- which fall within the ranges of the claim (see paragraph [0034] of the Takahisa et al. reference '828).

It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have further modified the Utz et al. method by having made use of a film with small shrinkability that is formed by stretching a film having deep draw moldability at 80 to 95°C with extension ratio of 2 to 4 times in a machine direction (MD) and with extension ratio of 2 to 4 times in a transverse direction (TD), and then shrinking the film at 60 to 98°C by 0 to 25% in the MD and by 0 to 25% in the TD, as taught by the Takahisa et al. reference '828, in order to ensure high quality packaging with no wrinkling of the package film. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

14. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art, as applied to claim 1 above, and further in view of Takahisa et al. (**JP 2001-071435**).

The modified Utz et al., as modified by the Sumitomo Bakelite Company reference, discloses the use of a film including a sealable resin layer and a polyamide resin layer, but does not disclose that the polyamide resin layer is formed having a melting point higher by about 15°C than the temperature for heating the film constituting the concave container portion and which has been stretched and then thermally relaxed, and if desired a surface layer formed of a thermoplastic resin.

The Takahisa et al. reference '435 discloses that it is old and well known in the relevant art to provide a film with small shrinkability which comprises a sealable resin layer; a polyamide resin layer which is formed of a polyamide resin having a melting point higher by about 15°C than the temperature for heating the film constituting the concave container portion and which has been stretched and then thermally relaxed; and a surface layer formed of a thermoplastic resin (see paragraphs [0020] and [0021]).

It should be noted that the language "and, if desired, a surface layer formed of a thermoplastic resin" is an optional limitation which does not have to be present in order for the claim language to be met.

It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have further modified the Utz et al. method by having made use of a film with small shrinkability which comprises a sealable resin layer; a polyamide resin layer which is formed of a polyamide resin having a melting point higher

by about 15°C than the temperature for heating the film constituting the concave container portion and which has been stretched and then thermally relaxed; and a surface layer formed of a thermoplastic resin, as taught by the Takahisa et al. reference '435, in order to ensure high quality packaging with no wrinkling of the package film. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

**15.** Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art, as applied to claim 2 above, and further in view of Takahisa et al. (**JP 2001-071435**).

The modified Utz et al., as modified by the Sumitomo Bakelite Company reference and the Takahisa et al. '828 reference, discloses the use of a film including a sealable resin layer and a polyamide resin layer, but does not disclose that the polyamide resin layer is formed having a melting point higher by about 15°C than the temperature for heating the film constituting the concave container portion and which has been stretched and then thermally relaxed.

The Takahisa et al. reference '435 discloses that it is old and well known in the relevant art to provide a film with small shrinkability which comprises a sealable resin layer; a polyamide resin layer which is formed of a polyamide resin having a melting point higher by about 15°C than the temperature for heating the film constituting the concave container portion and which has been stretched and then thermally relaxed; and a surface layer formed of a thermoplastic resin (see paragraphs [0020] and [0021]).

It should be noted that the language "and, if desired, a surface layer formed of a thermoplastic resin" is an optional limitation which does not have to be present in order for the claim language to be met.

It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have further modified the Utz et al. method by having made use of a film with small shrinkability which comprises a sealable resin layer; a polyamide resin layer which is formed of a polyamide resin having a melting point higher by about 15°C than the temperature for heating the film constituting the concave container portion and which has been stretched and then thermally relaxed; and a surface layer formed of a thermoplastic resin, as taught by the Takahisa et al. reference '435, in order to ensure high quality packaging with no wrinkling of the package film. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

**16.** Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sumitomo Bakelite Company (**JP 61-6787**) in view of Takahisa et al. (**JP 2001-071435**).

The Sumitomo Bakelite Company film meets all of applicant's claimed subject matter with the exception of the film includes a sealable resin layer (a); a polyamide resin layer (b) which is formed of a polyamide resin having a melting point higher by about 15°C than the temperature for heating the film and which has been stretched and then thermally relaxed; and, if desired, a surface layer (c) formed of a thermoplastic resin.

The Takahisa et al. reference '435 discloses that it is old and well known in the relevant art to provide a film with small shrinkability which comprises a sealable resin layer; a polyamide resin layer which is formed of a polyamide resin having a melting point higher by about 15°C than the temperature for heating the film constituting the concave container portion and which has been stretched and then thermally relaxed; and a surface layer formed of a thermoplastic resin (see paragraphs [0020] and [0021]).

It should be noted that the language "and, if desired, a surface layer formed of a thermoplastic resin" is an optional limitation which does not have to be present in order for the claim language to be met.

It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have modified the Sumitomo Bakelite Company film by having made use of a film with small shrinkability which comprises a sealable resin layer; a polyamide resin layer which is formed of a polyamide resin having a melting point higher by about 15°C than the temperature for heating the film constituting the concave container portion and which has been stretched and then thermally relaxed; and a surface layer formed of a thermoplastic resin, as taught by the Takahisa et al. reference '435, in order to ensure high quality packaging with no wrinkling of the package film. Furthermore, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Art Unit: 3721

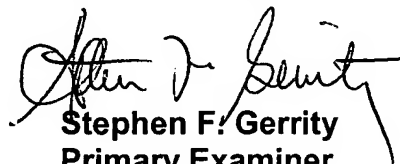
### Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed on the attached form (PTO-892) are cited to show various methods for packaging and to various forms of films. All are cited as being of interest and to show the state of the prior art.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen F. Gerrity whose telephone number is 571-272-4460. The examiner can normally be reached on Monday - Friday from 5:30 - 2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
**Stephen F. Gerrity**  
**Primary Examiner**  
**Art Unit 3721**

20 September 2006